each of the at least one temperature sensor is sealed into an electrically insulating glass.

21. (Amended) The semiconductor laser as recited in claim 16 wherein the at least one temperature sensor is included in the semiconductor laser chip, wires for measuring an electrical resistance through the semiconductor laser chip being mounted on the semiconductor laser chip.

26. (Amended) A semiconductor laser comprising:

at least one first semiconductor laser chip;

at least one second semiconductor laser chip, the at least one second semiconductor laser chip forming a semiconductor laser array with the at least one first semiconductor laser chip;

at least one temperature sensor associated with the semiconductor laser chip for measuring an operating temperature, each of the at least one temperature sensor being one of disposed directly on and integrated in a respective one of the semiconductor laser chip and the at least one second semiconductor laser chip for measuring a respective operating temperature, an operating temperature of the semiconductor laser array being measurable by measuring the operating temperature of the at least one first semiconductor laser chip and the at least one second semiconductor laser chip, a respective output wavelength of the semiconductor laser chip and the at least one first semiconductor laser chip and at least one of the second semiconductor laser chip being adjustable by varying their respective pumping currents.

32. (Amended) The semiconductor laser as recited in claim 16 <u>further comprising:</u>

[wherein the measured operating temperature is used in] a closed-loop control circuit including a setter for adjusting the operating temperature.

Please add without prejudice new claims 34-51 as follows:

34. (New) A semiconductor laser comprising:

a semiconductor laser chip; and

at least one temperature sensor configured to be disposed directly on the semiconductor laser chip for measuring an operating temperature,

wherein the at least one temperature sensor is secured by welding directly on the semiconductor laser chip, an energy for the welding coming from a light source, the light source including at least one of a ND-glass source, a Nd-YAG source and a source having a similar spatial distribution and similar spectral distribution to a Nd-glass source or a Nd-YAG source.

sub D1 > 35. (New) The semiconductor laser as recited in claim 35 wherein prior to the welding each of the at least one temperature sensor is sealed into an electrically insulating glass.

Cb 36. (New) The semiconductor laser as recited in claim 34 wherein each of the at least one temperature sensor is arranged and secured in a respective hole, each of the respective hole being formed in the laser chip using light-welding.

37. (New) The semiconductor laser as recited in claim 34 wherein the at least one temperature sensor is included in the semiconductor laser chip, wires for measuring an electrical resistance through the semiconductor laser chip being mounted on the semiconductor laser chip.

sub D2 > 38. (New) The semiconductor laser as recited in claim 39 wherein the wires for measuring the electrical resistance through the semiconductor laser chip include a pumping current lead wire and an additional wire used as a sensor supply lead.

39. (New) The semiconductor laser as recited in claim 34 wherein the at least one temperature sensor includes a thermoelement.

40. (New) The semiconductor laser as recited in claim 34 wherein the at least one temperature sensor includes a thermoelement having two wires joined by laser-light welding and secured in a common work step to the semiconductor laser chip.

sub D3 > 41. (New) The semiconductor laser as recited in claim 42 wherein a contact surface of a material of one of the wires is deposited on the semiconductor laser chip before the two wires are joined.

42. (New) The semiconductor laser as recited in claim 34 wherein each of the at least one temperature sensor includes a respective thermoelement disposed directly on the semiconductor laser chip, each of the thermoelements being operatable in a reversed operation as a respective Peltier element having a current source for adjusting a respective temperature with local selectivity.

43. (New) The semiconductor laser as recited in claim 27 wherein the semiconductor laser chip includes an active laser zone having at least one measuring point for measuring a wavelength of the semiconductor laser chip so as to enable an adjusting of the wavelength.

Cb

44. (New) The semiconductor laser as recited in claim 28 wherein the semiconductor laser is included in a telecommunications laser and the semiconductor laser chip includes one measuring point in the active zone.

sub D4

45. (New) The semiconductor laser as recited in claim 45 wherein the semiconductor laser is included in a high-performance laser and the semiconductor laser chip includes a plurality of measuring points along the active laser zone.

46. (New) The semiconductor laser as recited in claim 44 wherein the at least one temperature sensor includes at least two thermoelements operated and configured in a cascade arrangement.

47. (New) The semiconductor laser as recited in claim 34 further comprising a respective temperature setter and a respective temperature controller associated with each of the at least one temperature sensor and disposed on the semiconductor laser chip.

48. (New) The semiconductor laser as recited in claim 26 wherein the at least one temperature sensor is disposed directly on the semiconductor laser chip for measuring an operating temperature.

49. (New) The semiconductor laser as recited in claim 26 wherein the at least one temperature sensor is integrated in the semiconductor laser chip for measuring an operating temperature.

50. (New) The semiconductor laser as recited in claim 32 wherein the at least one temperature sensor is disposed directly on the semiconductor laser chip for measuring an operating temperature.

cb end

51. (New) The semiconductor laser as recited in claim 32 wherein the at least one temperature sensor is integrated in the semiconductor laser chip for measuring an operating temperature.

REMARKS

New claims 34 to 51 have been added. Claims 16, 19, 21, 26 and 32 were amended above. No new matter has been added. Thus, claims 16 to 51 are currently pending.

Applicants respectfully request reconsideration of the present application in view of this response.

Regarding paragraph one (1) of the Office Action, claims 26 and 32 were objected to under 37 C.F.R. 1.75(c) for being of improper dependent form. Accordingly, claims 26 and 32 have been amended above. A version showing changes made to claims 26 and 32 is attached hereto, where underlining indicates added text and bracketing indicates removed text. Applicants respectfully submit that claims 26 and 32 as amended above are in condition for allowance.

Regarding paragraphs two (2) and three (3) of the Office Action, claims 16 to 33 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Specifically, claim 16, and thus, by dependence, claims 17 to 33, was rejected for containing "configured to be one of disposed directly on and integrated in." Claim 16 has been rewritten above to correct this. Further, new claims 34 to 51 have been included to account for those feature(s) amended from claim 16. A version showing changes made to claim 16 is attached hereto, where underlining indicates added text and bracketing indicates removed text. No new matter has been added. Applicants respectfully submit that claim 16 as amended above is in condition for allowance.

Since claims 17 to 33 depend from claim 16, either directly or indirectly, those claims are allowable for the same reason(s) as claim 16.

Accordingly, withdrawal of the rejections of claims 16 to 33 under 35 U.S.C. §112, second paragraph, is respectfully requested.

Regarding paragraphs four (4) and five (5) of the Office Action, claim 16 was rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,680,410 to Kim et al. (the